

IP Management and Technology Transfer
Prof. Gouri Gargate
Rajiv Gandhi School of Intellectual Property Law
Indian Institute of Technology, Kharagpur

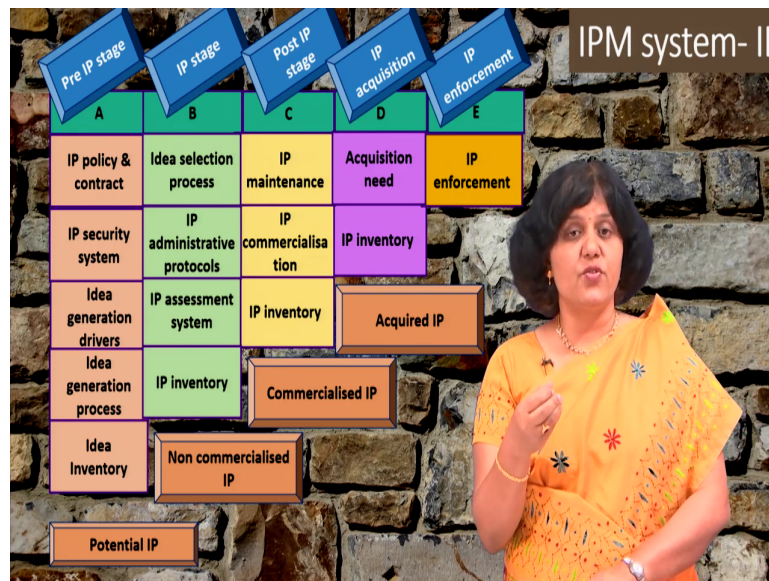
Lecture - 15
IPM System Model - II

(Refer Slide Time: 00:26)



A very warm welcome in the course IP Management and Technology Transfer. In this week, we are focusing on the different ways how IP management system can be exhibited, how IP management system can be placed or how IP management system will be which will take care of the different types of the stages the different processes of the IP management.

(Refer Slide Time: 00:52)



So, the whole life IP life cycle will be taken care by this system and how that system will look. So, you can see here there are total five stages actually titled A, B, C, D and E. So, we will go into details of what is the name of that stage and all, but we will divide this in this IPM model. It is divided into five stages as A, B, C, D, E.

Now, we will focus on each of the stage in detail. So, if we focus on the first stage that is M you can see here IP policy and contract. So, in this model actually there are 15 different major processes which are related to IP management. Out of that 15, this is the first step under this stage M.

Now, this IP policy and contract covers whatever the different types of agreements or maybe different kinds of contracts which are related to intellectual property all which will all will be covered under this IP contracts and IP policy. Now, considering IP policy obviously, this

policy will be dependent on whole business policy, business region, mission and based on that this policy will be drafted.

And, this IP policy which is obviously, dynamic in nature meaning is that it is always one thing it is a standard way of IP policy it is said that one thing is always life and the few things are always settled. So, that is a dynamic IP policy and yes, if you are dealing with any private organization, they you can see that every three months their policy their amendments are there, the changes are there. So, that is that IP policy.

Then there are the contracts, huge number of contracts are there actually because you are dealing with so many technologies if it is a big organization just to give you idea so that we can get the complexity how complex the system maybe. If I give you the idea about the leader in electrical engineering domain and can you name any organization? Siemens ok, then Phillips, Indian organization likes Crompton's Greaves. Ok.

So, now suppose I take example of a Siemen. Can you guess what number of patents Siemens have? Any idea? Any number? It is around it is around 60000 plus patents actually. I can just imagine 60000 plus patents if this organization is having, then what will be the portfolio of trademark? What will be the portfolio of industrial design? It is a huge thing actually and now so many projects are going on in the organization.

Now, in this scenario what will happen? So many technology transfer related say processes are going on related to that the trade secret is there, know-how is there, tacit knowledge is there, some joint ventures are going on, maybe strategical answers are going on – whatever it may be, it is all going on through some contracts and there obviously, there is involvement of an intellectual property, know-how trade secret so that intangible assets that intangible properties obviously, involve.

So, all these contracts will be will we have to take the we have to take kind of a stock of that, we have to examine that whenever we are doing that examination or evaluation of IP management system. So, these IP policies and contracts, this is the first major process. Then

the second process is the IP security system. Now, what happens? Just now I mention that there is a trade secret, there is a know-how, there is a tacit knowledge.

So, when we are talking about this kind of a very confidential information right we have to take a certain caution to protect that thing. So, what kind of a system we are implementing in the organization when we are dealing with a IP management system. So, all this IP security system related processes will be the second major process which will be taken care when we are doing the IP life cycle management through this like IP management system whenever we will develop, we will have to take care of that particular thing.

Now, then next we are like focusing on the there is a like a idea generation drivers. So, generally when we are talking about a human being we say that in day 60000 plus thoughts come in a human mind. You just imagine the organization again I will take example of a Siemens, so that we can get the idea with 3 lakhs plus employees presence across the globe and in such scenario we just imagine that so many people such a good intellectual capital is working.

So, so many ideas are coming up. Now, we have to streamline that ideas actually, you have to streamline the processes of idea generation, you have to capture that particular idea generation. So, how this processes are set into the organization will be taken care by this idea generation drivers and the next one is a idea generation process.

So, this two will take care of that creation of the idea inventory in short which probably you can revisit visit revisit and then decide on which probably the idea is suitable for the implementation considering the business strategy and there are so many other parameters are there.

So, this four stages like a IP policy contract, then this IP security system, then there is IP generation drivers and processes are there. Now, this forms some idea inventory actually. So, we have that huge number of ideas which you have to scrutinize further for the implementation.

Now, you can just imagine now I have just given you example of a Siemens, but you can take example of MSME. You can take example of any academic organization; you can place in front of any research organization this system will be applicable there. 15 major processes are there and this is a first stage and this five stages is like a primitive kind of arrangement to enter into that IP management actually. So, innovation related some activities are involved here and then we are talking about IP management.

Now, let us move further into the second stage that is a B stage. Now, here you are looking into the idea selection process actually. So, we have seen here that ok such a huge idea inventory is created. It is not possible to work on each and every idea. So, you have to select from that idea and you know probably the that very popular funnel system or innovation system which is represented by the funnel example.

But if there are 10,000 ideas are there out of that only one or maybe 4 or 5 ideas will be selected. So, if 10,000 kind of a suggestions came then out of that 4 or 5 that only ideas will be selected for further development actually. So, that much scrutiny goes while selection of the project and it is not like that this idea is not good because of that it is not selected.

But, the main important thing is like that what is the market gain, what is your business strategy, what is your vision mission, what is your objective of organization, all these factors. And, there are so many other parameters are there which will be applied and based on that then there will be the selection of the idea. And, once that idea will be selected then the project will actually start and then you will have to focus on the IP creation.

Now, the next step is like a IP administration protocols. So, now what happens that? Ones project start actually. So, for example, if you are a academic institute. In academic institute the setup is the that one department which will take care of that project management.

There are different names in different names to that particular department according to your setup and that particular unit will take care of the project execution and probably there itself

will be the legal department of the organization, IP department of that organization or that academic institute.

So, that what will happen and that actual that R and D or project will be initiated, when there will be the provisional application, qualifying, invention will be generated. Then that inventor will contact the point that IP person or a legal person whosoever is indicated in that organization. So, obviously, we have to give that indication who is that contact point for the invention disclosure and all.

So, when we are talking about IP administration protocols actually hold that process like where to file that invention disclosure, where to whether it is a manual process or whether it is a online process because nowadays it is generally a online process in a organizations in academic institutes also, it is like that processes are set.

So, you just submit that invention disclosure and once you submit that invention disclosure, that will be taken care by the IP department and they will do that further processing of IP disclosure that novelty check is there, then contacting that council is there or patent expert is there, whosoever is may be and then there you are going to give the details of that invention.

And, then further that patent drafting and whole process will be taken care of. But how this administration will be there? To whom it you should contact, what is the website, where exactly you have to do that? All these processes will be taken by taken care by this IP administration protocols.

Next stage is the IP assessment. Now, in IP assessment what happens exactly that you have given invention disclosure, but what happens? Again, I will take the example that huge number of invention disclosures will be received by the office. Ok. Generally, this happens in the organizations which are having a very good IP system is developed.

But, in say in academic setup also nowadays that much awareness is there that so many faculty members, so many students are filing the invention disclosures, they are filing the patents, they are getting some incentives also from the government actually. So, then

whenever you are giving that invention disclosure actually, we have to scrutinize that particular invention disclosure whether especially if it is a organization, what they will do that they will assess it based on the certain parameters which are set.

So, that parameters are different actually based on again the what is the market need, again what is the business strategies involved, what is the feasibility of that product, everything will be taken care of. And, again there are so different number of actually there are so many parameter section that parameters will help to do the proper selection of the invention disclosure.

And, based on that then this invention disclosure will be selected and further processing of a IP filing will be taken care. Now, the next is what will happen? When we will go through this process actually you can just see here that you are going through this process and what will happen that the IP inventory will be created.

Now, this IP inventory actually now what happened that you have created intellectual property, you have protected the creation by using IP as a instrument that IP may be patent, that may be trademark, that may be industrial design, that may be copyright, anything it depends the outcome actually of that project and depending on that will be protected.

Now, the next step is like a further that is a there will be IP maintenance. Now, what happens, that ok you have created intellectual property, the IP inventory is ready now you know that every year you have to give especially patent I am talking that every year you have to give a fees of the maintenance or if trademark is there, there is a 10 years once you once that trademark is registered it is 14 years and every 10 year you have to review that particular thing renew actually that particular thing ok.

So, maintenance of that intellectual property especially I am talking about a patent you have to take a call because sometimes some technologies become obsolete, some technologies of not used, then there is chances like the particular patent is like may not be useful for your

business, then you have option like either you should license it out to somebody or either stop the giving the maintenance fee because maintenance cost itself is a huge budget actually.

So, you have to take care that how you can optimize that usage of that budget for a maximum IP creation actually. So, then you have to take a call which IP you will maintain and which IP you will not maintain. Again, you should have a standard procedures for that and yes, there are standard parameters and based on that decision is taken.

Probably this kind of scenario may not arise if you are just starting the IP protection and you are just creating the intellectual property. So, for example, if you are in academic institute generally current scenario if you see that we are now a scenario like we are just started with IP generation actually and number is not that challenging to handle and therefore, probably this step like maintenance related decision may not be that difficult.

But when we are talking about organizations against like huge established organizations where lot of creation is going on lot of invention disclosures are submitted by the inventors and at that time this stage is becoming very critical. And, the parameters you have to design it in very crucial way you have to take care that you will take a decision very judiciously because if you do mistake in this particular thing probably organization will be in the losses.

So, we have to take care with when you are dealing with each IP you have to be very careful while taking that decision actually. So, this is a IP maintenance. Now, next is IP commercialization. Actually, what happens? That IP commercialization there may be there are different ways. So, for example, you may go for in house development of that particular product and in that this IP is utilized that patent whatever the technical advancement we have proposed in that patent that will be used in the product offering actually.

So, in house development may be there, licensing may be there or sale may be there whatever it may be means it depends on how you are going to commercialize that IP. Ok. So, when you are dealing with that particular kind of activity that IP commercialization which is a expected thing actually.

So, we are not expecting IP for the sake of a creation. Once we created, we are expecting that it is utilized and either a product or a service is created based on that particular IP or may be some strategic use of that IP is expected. So, this is the IP commercialization.

Then the next stage is like a IP inventory. So, what will happen? At the end of this stage also there will be creation of IP inventory, but that will be definitely different than the previous stage. Now, in the previous stage what happened? We have tried to protect IP. In the next stage what we have done? That we have decided to maintain that IP and then again, we have taken a decisions about the commercialization.

In the first stage what we have done we have created ideas. So, we move from that ideas, then we went to the inventory where we have created IP and then we moved into the next stage where IP is a commercialized. Ok. Now, let us move into the next that is a four stage actually that is related to acquisition. Now, this is the first whatever the three stages we have seen it is happening inside the organization.

Again, I have told you that the stages will be different if academic institute will be there scenario is different. If MSME is there, scenario is different; if very well established organization is there, scenario is different and if you are a leader international kind of presence if you check and if you are a leading in that particular thing obviously, the scenario is different.

So, that four levels if I want to just put it broadly, I can say that this different scenarios you can observe actually. And, now, this everything like a policy, contract then the idea inventory then idea generation drivers and processes or security system, it the complexity will go on increasing actually. Ok.

In may be in academic institute that much if policies there contracts are properly taken care probably and then idea generation drivers probably that is good enough. Then you are going for idea selection, you have to do that thing and then you are going for a IP administration and

generation of IP. Maintenance is again I have told you that may not be critically in academic setup.

If MSME if you take, what will happen? Generally, it is as good as same as academic, but again you have a burden of a commercialization and there is mostly MSME or the observation is that whatever IP MSME is creating they are commercializing that thing rather sometimes what happen they have created IP, but they have forgotten or they are not aware about the protection of IP. That is a major kind of issue when we are dealing with a MSME.

If you take a organization establish then all these processes in stage 1 that 5 stages five major processes are there, in stage B there are four and in stage C there are three. So, all will be taken care and if you are a leader like a having a international market and all this process are very very complex actually. Ok. So, this is the scenario.

Now, this acquisition: when this again I will take example of a organizations which are at a well established and which are either have a international presence. So, very well established organizations if you take probably they think of that acquisition and all generally this is observation exceptions are always there.

So, acquisition need may arise sometime and there are various reasons actually and based on that reasons sometimes you that big organization when they are doing the mapping they check out that some start up is coming up with a very innovative solutions for the problems probably this organization is working on and then at that time they decide to do or acquire that particular start up actually.

So, this there are so many examples I have just cited one example here. So, that is a that may be the need of a acquisition. So, based on acquisition need what will happen there will be the acquisition and there will be the acquired IP or from the acquired organization because nobody will spend money to acquire organization which is not having any IP portfolio or not having very promising technology.

So, obviously, from that acquisition you are creating the inventory and again that is another set of IP inventory. So, first there is an idea inventory you have seen then there is a 1, 2 and 3 IP inventories are there, right and the level is different. First, you are just created it; second, you have scrutinized it and commercialized it; in third stage you are acquired something and we are talking about that inventory.

Now, the fifth stage that is an IP enforcement stage. Again, this is a very important stage because what happens especially when you are in a market with your presence across the globe probability of infringement is there may be local vendors may be some the competitor generally the small players may try to copy that particular product or service and at that time you have to take steps you have to use a legal remedy, you have to enforce your rights actually.

So, that is what the IP enforcement actually unless until we enforce our rights probably we are not able to make a presence in a sense if you allow that infringement you are losing your revenue in the market. So, generally what happens that this giant organizations have a separate department which will take care of an IP enforcement. Ok

Now, let us move to the next stage that is which are these inventories actually. So, when you say this idea inventory you can say that it is a potential IP in the IP management system we can say that potential because out of that so many ideas many might be qualifying or many will be like potential IP qualifying the criteria of an IP.

Then in the second stage, you are creating the non commercialized IP. So, here what is happening that the IP which is not commercialized, but received the protection you have done the protection you have protected it by IP and you have created that IP portfolio, but it is a non-commercialized.

In the third stage you can see that there is a commercialized IP because out of that inventory which is non commercialized you have created that commercialized IP and now you are using

it that you are generating revenue out of that particular. Then the next is like a acquired IP. So, through acquisition you have created that portfolio that is a acquired IP.

But obviously, as you see the model here the number is reducing because potential IP is more, then there is a non commercialized IP, then there is a commercialized IP and then there is a acquired IP. So, number goes on like reducing actually. Ok. Now, what is that stages are called? So, if this first stage is like a A that is a it is called as a pre IP stage because you are like a before IP creation all these processes like policy, contract, security system, idea generation. So, it is a pre IP stage and you are like creating the potential IP them.

The next stage is like a IP stage. So, what is happening? Here exactly you are protecting the IP and you are creating the IP portfolio actually which is a non-commercialized IP. Then in the next stage what is happening? You are entering into commercialization IPM. So, it is a post IP stage and just recollect the first module actually where we have seen that how that pre IP stage IP stage and a post IP stage is there and how that integrated portfolio is created.

Now, you just see you can see here that this potential IP, non-commercialized IP, commercialized IP and acquired IP. This is how whole it is creating the integrated IP portfolio for that organization. Next is like a IP acquisition. So, whenever is required you are doing the process of acquisition and the last stage is called as the IP enforcement.

So, if you are like generally now means proactively this giant organizations, they are doing this IP infringement they are going for IP enforcement and separate kind of arrangement is made separate departments are created to take care of that IP infringement.

Probably I just cite a example so that you will appreciate that sometimes if you are academic institute probably you may get notices from the within the organization, you get some warning e-mails from the your authorities or related to same IT and all. So, they say that if you are using pirated versions and all please avoid using of that particular thing and all.

So, whenever they are giving you warning the thing is like that this the owners of that particular software probably, they have started the enforcement action and they are giving you

the warnings that do not use that pirated versions actually. And, then if that after warning probably they will enforce their, right and probably they will you the institute or organization may have to pay huge penalty for that infringement. So, that kind of scenario may arise.

So, this is a simple example I have given, but there are huge billion dollar involved infringement cases are going on in the court especially in the Europe and USA and they are taking care if there is any infringement, they are definitely taking a legal action against that.

So, if you see this overall system here that ok that five stages, fifteen major processes and four inventories are them. This is like a if you try to apply it to your organization, probably it will be easier for you to develop your IP management system. So, this is whole about this IP management system. Now, let us watch the video here.

(Refer Slide Time: 28:54)



We will share with you a case study of how a single patent can provide competitive advantage to build an organization. This case study is from healthcare industry. I feel this case study is a right representation of combination of inventorship and entrepreneurship. An inventor very passionate about his domain invents very unique technique, but unaware about importance of his invention in IP point of view he was not able to appreciate importance of his invention.

No potential IP identification and publication of the invention and the invention is released in public domain through newspaper. So, one chapter is over because if generally the rule is that the invention if comes into the public domain you cannot patent it. Now, this thing is happened in this case. Now, then due to the awareness and promptness of the university, Stanford University the patent is filed.

Now, how this happened? This happened because in USA there was one year timeline although if you release your patent into the public domain, you have a one year timeline and within that you have to file the patent that is called as a first to invent that kind of facilities available in USA only.

Now, because of this the Stanford University could able to file the patent about or on this invention. Eventually, this patent helped to established a giant organization and can you guess how much fortune the Stanford University made from this patent? Stanford University made approximately 255 million dollars from the licensing.

It is a very interesting story. So, somewhere or the other such scenario you might have observed good invention, but published without patenting and then lost the chance of exploring the invention for wealth creation. So, this case study may help you to avoid any such scenario. So, let us see, what is that success story of an inventor who built a giant organization by taking an advantage of patent system so, here we go.

(Refer Slide Time: 31:17)



Can you see who are the scientists? Any guess? Ok. I am giving you another hint. Check this image. Now, any guess? Ok one more hint.

(Refer Slide Time: 31:36)



Publication number	US4237224
Publication type	Grant
Application number	US 06/001,021
Publication date	2 Dec 1980
Priority date	4 Nov 1974
Inventors	Stanley N. Cohen Herbert W. Boyer
Original Assignee	Board of Trustees of the Leland Stanford Jr. University

These are the details of the patent. Now? Yes, they are Stanley Cohen and Herbert Boyer and the original assignee is Board of Trustees of the Leland Stanford Junior University. This information on the screen you are seeing is what is publication number, what is publication type, what is application number, what is publication date, what is priority date, who are the inventors and who is the original assignee. This is an standard format to provide an information about a patent.

So, I hope you have enjoyed the video and with this we are coming to the end of session; just remember fifteen processes, fifteen major processes, five stages and four inventories. So, this is what the IP management system probably you can apply it, try to apply it. I will just suggest you they try to apply this to your organization wherever you are working and probably, you will get idea for development of your own IP system in your organization.

See you in the next session. Thank you.

(Refer Slide Time: 32:55)

